

FLOYD YSBRAND
Appl. No. 10/720,685
January 24, 2005

AMENDMENTS TO THE DRAWINGS

Substitute sheets of drawings showing corrected Figures 1, 7 and 9 with proper cross-hatching are submitted herewith.

Attachment: Replacement Sheets (3)

REMARKS/ARGUMENTS

The Examiner has objected to the drawings for the reason that Figures 1, 7 and 9 lack the proper cross-hatching for indicating the type of materials. Substitute drawing sheets showing Figures 1, 7 and 9 with the proper cross-hatching are submitted herewith.

The Examiner has objected to the Abstract because it contains the terms "comprise". An amended Abstract of the Disclosure is submitted herewith wherein the terms "comprises" and "comprise" have been changed to "has" and "have", respectively.

Claims 1-3 and 5-6 stand rejected under 35 U.S.C. 102(b) as being anticipated by Fujikura; Claim 18 stands rejected under 35 U.S.C. 102(b) as being anticipated by Mulrooney et al.; Claims 5, 10-14 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fujikura in view of Johnson; Claims 8 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fujikura in view of Hale; Claims 15-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Fujikura in view of Johnson and further in view of Hale; Claims 19-21 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mulrooney et al. in view of Mildner; and Claims 22 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mulrooney et al. in view of Fujikura. It is noted that the Examiner has not made a rejection specifically directed to dependent Claim 4.

Claim 1 has been cancelled and new Claim 24 has been added to the present application. Claims 2-7, 9 and 10 depend directly or ultimately from new Claim 24.

Claim 24 calls for a tape for shielding insulated electrical wire wherein the tape comprises a conductive layer formed of metallic powder dispersed in PTFE; an outer insulation layer formed of PTFE disposed on and bonded to the outer surface of the conductive layer; an inner insulation layer formed of PTFE disposed on and bonded to the inner surface of the

conductive layer; and the inner and outer insulation layers being offset laterally with respect to each other to expose inner and outer lateral end portions of the conductive layer, thereby enabling the tape to be spirally wound on and bonded to the insulated wire with abutting insulation layers covering the lateral end portions of the conductive layer. For the reasons set forth hereinafter, it is submitted that the novel recitations of the new Claim 24 are not anticipated or rendered obvious by the teachings of the cited references, taken individually or in combination.

Claim 11 has been cancelled and new Claim 25 has been added to the present application. Claims 12-15 depend directly or ultimately from new Claim 25.

Claim 25 recites a shielded electrical wire comprising insulated wire; a first insulation layer formed of PTFE surrounding the insulated wire; a conductive layer surrounding the first insulation layer, the conductive layer comprising metallic powder dispersed in PTFE; and a second insulation layer formed of PTFE surrounding the conductive layer; the conductive layer and the insulation layers being formed by a tape having said layers bonded together that is spirally wound around and cured on the insulated wire; the first and second insulation layers being offset laterally with respect to each other on opposite surfaces of the conductive layer to expose inner and outer lateral end portions thereof which are covered by abutting spirally wound insulation layers. For the reasons set forth hereinafter, it is submitted that the novel recitations of new Claim 25 are not anticipated or rendered obvious by the teachings of the cited references, taken individually or in combination.

Fujikura discloses a coaxial cable comprising a conductor, an insulating layer of PTFE resins; a conductive layer of PTFE resin, and an outer coating layer of PTFE resin which are heat-treated. The Examiner has admitted that Fujikura does not disclose a tape that can be

spirally wrapped, the inner conductive layer being formed of metallic powder disposed in PTFE, a tape or a shielded electrical wire wherein the tape has inner and outer insulation layers and an intermediate conductive layer, the inner and outer insulation layers being offset laterally with respect to each other to expose inner and outer lateral end portions of the conductive layer, or an adhesive with slipsheet layer being disposed on the inner surface of the inner insulation layer. Accordingly, Fujikura does not anticipate or render obvious the novel recitations in the new Claims 24 and 25, and the claims depending therefrom.

The Mulrooney et al. reference was cited by the Examiner for its teaching of a method wherein a tape 4 having a metal coat 5 on one side and a semiconductive adhesive polymer film 8 on the other side is spirally wound around a wire 1, 2 and thereafter heated and cured thereon. Other than this teaching, Mulrooney et al. fails to add anything of significance to Fujikura with respect to the novel recitations of new Claims 24 and 25, and the claims depending therefrom.

The patent to Johnson was cited by the Examiner for its teaching of the tape layer 16 in a coaxial cable that is spirally wrapped around the insulated conductor 12, 14, and comprises carbon filled PTFE. Tightly applied over the tape layer 16 are braids 22 and 26 formed of metal and a high strength synthetic filamentary material, respectively. One or more PTFE layers 30 or 32 are spirally wrapped around the second braid 26. There is clearly no teaching in Johnson of a tape or shielded electrical wire wherein the tape comprises a conductive layer comprising metallic powder dispersed in PTFE and inner and outer insulation layers formed of PTFE surrounding the conductive layer, with the insulation layers being offset laterally with respect to each other on opposite surfaces of the conductive layer to expose inner and outer lateral end portions thereof. The Johnson reference, therefore, fails to supply the deficiencies of Fujikura with respect to the novel recitations in Claims 24, 25 and the dependent claims.

The patent to Hale was cited by the Examiner for its teaching of a shielding and insulating wrapping means having an offset outer insulating layer 22 and inner conductive layer 24. In Fig. 5, the inner conductive layer 24' is formed of an inner ply 50 of a strengthening material such as Mylar disposed between two outer plies 52 and 54 of a metallic shielding material. The plies 50, 52 and 54 are not offset with respect to each other. It is apparent that Hale fails to disclose or suggest a tape or shielded electrical wire wherein the tape is formed of a conductive layer formed of metallic powder dispersed in PTFE that is surrounded by inner and outer insulation layers formed of PTFE that are offset laterally with respect to each other to expose inner and outer lateral end portions of the conductive layer. Accordingly, Hale fails to supply the deficiencies of Fujikura with respect to the novel recitations in new Claims 24 and 25 and the dependent claims.

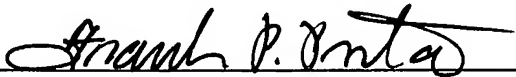
The patent to Mildner was cited by the Examiner for its teaching of certain manufacturing parameters that were of significance with respect to the cancelled method Claims 19-21. Other than this teaching, Mildner fails to add anything of significance to the teachings of the other cited references with respect to the novel recitations in new Claims 24 and 25 and all of the dependent claims.

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In view of the above amendments and remarks, it is submitted that new Claim 24, dependent Claims 2-7, 9 and 10; new Claim 25, and dependent Claims 12-15 are clearly allowable to Applicant. Formal allowance of these claims is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
Frank P. Presta
Reg. No. 19,828

FPP:cgp
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100